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EXAMINER	
TODD, GREGORY G	
ART UNIT	**PAPER NUMBER**
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/648,420	Applicant(s) DAY ET AL.	
	Examiner Gregory G. Todd	**Art Unit** 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *09/01/04, 05/23/05*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This is a third office action in response to applicant's amendment and request for continued examination filed, 25 June 2004, of application filed, with the above serial number, on 28 August 2000 in which claims 1-4 and 6-8 and 11-14 have been amended and claims 15-20 have been cancelled. Claims 1-15 are therefore pending in the application.

It is noted Applicant has suggested on page 2 of response received 25 June 2004 that claims 1 and 8 have been amended to be claim numbers 21 and 22. However, nowhere else are these claims numbers referred to and claims 1 and 8 are listed as currently pending, further the supposed claims 21 and 22 are identical to claims 1 and 8, thus claims 1 and 8 are still considered pending.

It is noted claim 5 is listed as currently amended, however, no amendments are indicated in the marked-up copy of claims.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 recites the limitation " the network of caching servers " in line 19. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chauhan (hereinafter "Chauhan", 6,115,752) in view of Scharber (hereinafter "Scharber", 6,542,964).

As per Claim 1, Chauhan discloses a method, comprising:

receiving a request from a user for a web page at a first web address, the first web address including the hostname (request for address) (at least col. 6, lines 45-53);

determining traffic loads of a plurality of mirrored customer web servers, each of the customer web servers storing the web page (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a customer web server from the plurality of mirrored customer web servers that is appropriate for the request, the customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (mirrored server with best route) (at least col. 7, lines 24-42);

determining an IP address of the customer web server (address name server) (at least col. 1, lines 41-53; col. 6, lines 45-63);

directing the request from the user to the customer web server (ONS routing request) (at least Fig. 4); thereafter

receiving a request from the user for content on the web page at a second web address, the second web address including the hostname (request for an address) (at least col. 6, lines 45-53);

determining service metrics of servers in a network of servers (mirrored server round trip times) (at least col. 7, lines 24-42);

determining the server from the network of servers that is appropriate for the request for content, the server having service metrics better than service metrics of remaining servers from the network of servers (mirrored server with best route) (at least col. 7, lines 24-42).

Chauhan does not explicitly disclose caching servers as having cached static content thereon to further mirror data of a customer webpage. However, the use and advantages for using such a cache server is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses many types of cache servers including POP cache servers for redirecting requests for a most economical delivery of content to an end user (at least col. 4, lines 13-26, 46-56; col. 1, lines 60-67; col. 7, lines 3-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of Scharber's POP cache serving into Chauhan's system as this would further enhance Chauhan's system to lessen load and traffic on mirror sites and use Chauhan's optimizing address name translating with Scharber's POP cache servers so as to geographically optimize latency between a client and static content from a server thereon. Further, it is very well known in the art to use proxy / caching servers to serve static content from a host to users, as Scharber teaches, and to also use mirror servers as Chauhan teaches.

As per Claim 2.

determining load of servers in the network of servers (at least col. 2, lines 14-33; col. 3, lines 39-53);

wherein determining the server from the network of servers that is appropriate for the request, the server having a latency and a load lower than latency or load of the remaining servers from the network of servers (at least col. 2, lines 14-33; col. 3, lines 39-53).

As per Claim 3.

Chauhan does not disclose caching static content. However, the use and advantages for using such caching is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses:

determining whether the caching server includes the static content; determining a web server that includes the static content when the caching server does not include the static content (at least Scharber col. 4, lines 13-26, 46-56);

retrieving the static content from the web server that includes the static content (at least Scharber col. 4, lines 13-26, 46-56); and storing the static content from the web server in the caching server (caching static content) (at least Scharber col. 4, lines 13-26, 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Scharber's static page caching into Chauhan's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 4.

wherein determining the web server comprises:

determining traffic loads of the plurality of mirrored customer web servers, each of the customer web servers storing the static content (mirror servers) (at least col. 3, lines 39-53); and

determining another customer web server from the plurality of mirrored customer web servers that is appropriate for the request, the another customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (best route to mirror server) (at least col. 3, lines 39-53).

As per Claim 5.

Chauhan does not disclose caching from another server. However, the use and advantages for using such a caching protocol is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses wherein retrieving the static content from the web server comprises:

determining another IP address of the another customer web server (peer cache or origin) (at least Scharber col. 4, lines 46-56); and

requesting the static content from the another customer web server at the another IP address (retrieving content from origin server) (at least Scharber col. 4, lines 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Scharber's static page caching into Chauhan's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 6.

wherein the network of servers comprises a domain name server (at least col. 1, lines 41-67).

As per Claim 7.

wherein the request from the user for the web page is transferred from a first domain name server (local name server) (at least Fig. 4);

wherein the network of servers comprises a second domain name server (ONS) (at least Fig. 4; col. 3, lines 23-38); and

wherein the second domain name server determines the customer web server from the plurality of mirrored customer web servers (ONS determines mirror server) (at least col. 3, lines 39-53).

As per Claim 8, Chauhan discloses a method, comprising:

receiving a first request from a client DNS server to resolve a first domain name, the client DNS server receiving a request from a user of a web page address that includes the first domain name (request for address) (at least col. 6, lines 45-53);

determining load measurements of a plurality of mirrored customer web servers, each of the customer web servers addressable by the first domain name, and each of the customer web servers configured to service the request from the user (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a customer web server from the plurality of mirrored customer web servers, the customer web server having a traffic load lower than traffic loads of other customer web servers from the plurality of mirrored customer web servers (mirrored server with best route) (at least col. 7, lines 24-42);

determining an IP address of the customer web server (address name server) (at least col. 1, lines 41-53; col. 6, lines 45-63);

providing the IP address of the customer web server to the client DNS server (LNS) (at least Fig. 4; col. 3, lines 39-53); thereafter

receiving a second request from the client DNS server to resolve a second domain name, the client DNS server receiving a request from the user of a uniform resource locator that includes the second domain name (request for an address) (at least col. 6, lines 45-53);

determining performance metric measurement of servers in the network of servers, each of the caching servers addressable by the second domain name (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a server from the network of servers, the server having performance metrics lower than performance metrics of other servers from the network of servers (mirrored server with best route) (at least col. 7, lines 24-42);

providing the IP address of the server to the client DNS server (LNS) (at least Fig. 4; col. 3, lines 39-53).

Chauhan does not explicitly disclose caching servers as having cached content thereon to further mirror data of a customer webpage. However, the use and advantages for using such a cache server is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses many types of cache servers including POP cache servers for redirecting requests for a most economical delivery of content to a end user (at least col. 4, lines 13-26, 46-56; col. 1, lines 60-67; col. 7, lines 3-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of Scharber's POP cache serving into Chauhan's system as this would further enhance Chauhan's system to lessen load and traffic on mirror sites and use Chauhan's optimizing address name translating with Scharber's POP cache servers so as to geographically optimize latency between a client and content from a server thereon. Further, it is very well known in the art to use proxy / caching servers to serve static content from a host to users, as Scharber teaches, and to also use mirror servers as Chauhan teaches.

As per Claim 9.

wherein the load measurements comprise latency measurements (at least col. 2, lines 1-9, 42-57).

As per Claim 10.

wherein the performance metric measurements comprise any of: load CPU and memory measurements, HTTP response measurements, and FTP response measurements (load, ping) (at least col. 2, lines 14-33; col. 3, lines 54-66).

As per Claim 11.

Chauhan does not disclose caching static content. However, the use and advantages for using such caching is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses wherein retrieving data from the caching server comprises:

determining whether the caching server includes the data (at least Scharber col. 4, lines 13-26, 46-56);

retrieving data from another customer web server from the plurality of mirrored customer web servers when the server does not include the data (at least Scharber col. 4, lines 13-26, 46-56); and

storing the data within the server (caching static content) (at least Scharber col. 4, lines 13-26, 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Scharber's static page caching into Chauhan's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 12.

wherein retrieving data from the other customer web server comprises:

determining the other customer web server from the plurality of mirrored customer web servers, the other customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (at least col. 2, lines 14-33; col. 3, lines 39-53); and

retrieving the data from the other customer web server (download content) (at least col. 2, lines 1-9).

As per Claim 13.

receiving a first request from a second client DNS server to resolve a third domain name, the second client DNS server receiving a request from a second user of a second web page address that includes the third domain name (at least Fig. 4);

determining load measurements of a plurality of second customer web servers, each of the second customer web servers addressable by the third domain name, and each of the second customer web servers storing data configured to service the request from the second user (mirrored servers) (at least Fig. 4);

determining a second customer web server from the plurality of second customer web servers, the second customer web server having a traffic load lower than traffic loads of other second customer web servers from the plurality of second customer web servers; determining an IP address of the second customer web server (at least col. 2, lines 14-33; col. 3, lines 39-53); and providing the IP address of the second customer web server to the second client DNS server (IP2) (at least Fig. 4).

As per Claim 14.

Chauhan inherently discloses more than one user using the system, and that with any user, the mirror site with the best performance characteristics will be chosen as the server to retrieve content from thereon:

receiving a second request from the second client DNS server to resolve the second domain name, the second client DNS server receiving a request from the second user of a second uniform resource locator that includes the second domain name (at least Fig. 4; col. 2, lines 10-33);

retrieving a second set of data from the caching server in response to the second uniform resource locator (at least Fig. 4; col. 2, lines 10-33); and

providing the second set of data to the user (at least Fig. 4; col. 2, lines 1-33).

Response to Arguments

6. Applicant's arguments filed 25 June 2004 have been fully considered but they are not persuasive.

Applicants argue, in substance, that Chauhan in view of Scharber does not teach a system using both mirrored customer servers and caching servers and, similarly, that it would not be obvious to combine the teachings of Chauhan with Scharber.

Scharber is relied on as disclosing cache POP servers with static content (at least col. 4, lines 21-26). Further, it is well known in the art that cache servers store static content, rather than dynamic content, since static content does not change and dynamic content cannot be predicted and changes with time and thus has no value of being cached. Also, the specification states on pp. 4, lines 1-5, static content as being cacheable content, which is clearly depicted in Scharber.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Scharber and Chauhan both address the problems with latency in user accessibility to a web hosting site. Scharber further teaches retrieving static content from a cache server (POP cache server, edge cache server, personal cache and proxy server, etc.). Chauhan does disclose web servers, as Applicant admits. However, the claims only require the second request as requesting static content, which happens to be on caching servers. The fact that the request goes to caching servers itself does not hold patentable weight as caching servers also act as web servers and is simply a species of web server, as the specification acknowledges, and Scharber is disclosed as being able to retrieve the request from a POP server having cached content thereon. As Chauhan discloses sending the request to the optimal web server, it is understood and inherent for the mirrored web server to be any kind of web server, in which a caching web server would definitely be a likely candidate as having static content which is the most desirable content for mirroring over servers. Further, the limitations of claims 1 and 8 do not appear to fully relate with each other. For example, in claim 1, the limitations after "thereafter" in line 12 could happen at any time and it is not clear from the claims if these steps are, for example, within the same session a client is accessing a host, or if the caching servers are part of or related to the mirrored customer web servers (eg. a cache of the mirror site or simply a cache of the origin site, both having the same static content).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Newly cited Jordan et al, Kumar et al, Jacobs et al, Amicangioli, Heddaya et al, and Schuba, in addition to previously cited Bharat et al, Lewis et al, O'Neil et al, Bolton et al, Emens et al, Shah, Leighton et al, Logan et al, Rune, Sitaraman et al, Malcolm, Herriot, Kapoor, and Gupta et al are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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